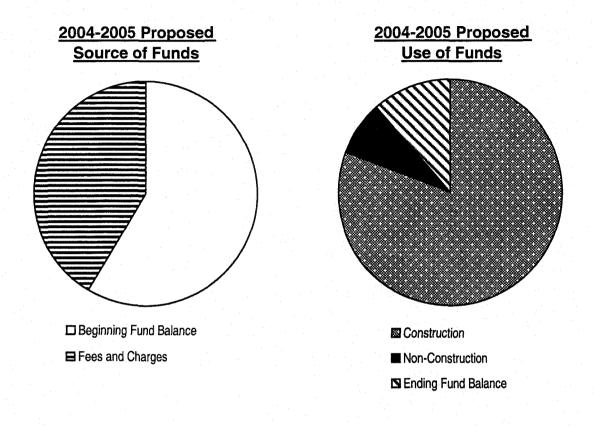
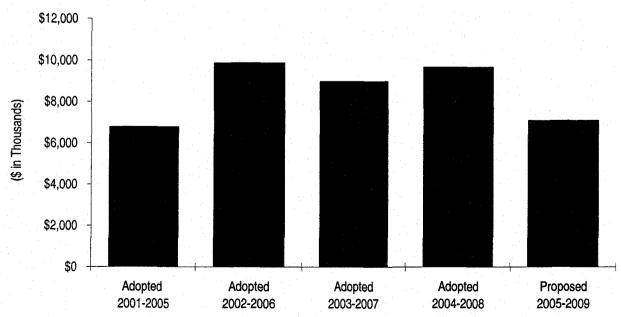
2005-2009 Capital Improvement Program

COMMUNICATIONS

COMMUNICATIONS CAPITAL PROGRAM 2005-2009 Capital Improvement Program







2005-2009 Proposed Capital Improvement Program

Overview

Introduction

In October 1990, the City assumed the responsibility of providing its own emergency communications service for police and fire from the County of Santa Clara. Communications Capital Program budget was set up to address the replacement and upgrade of both the public safety and non-public safety radio equipment. The inventory of equipment that is supported by this program consists of approximately 22 sites, 100 base stations, 980 mobile radios and 1,940 portable radios. Approximately 78% of this equipment is critical to the delivery of public safety services. The 2005-2009 Proposed Capital Improvement Program (CIP) provides funding of \$7.1 million, of which \$1.5 million is allocated in 2004-2005.

This program is part of the Strategic Support City Service Area (CSA) and supports the following outcomes from that CSA: Safe and Functional Public Infrastructure, Facilities, Materials and Equipment; and Effective Use of State-of-the-Art Technology. In addition to two outcomes in the Strategic Support City Service Area, the program supports one outcome in the Public Safety City Service Area: The Public Feels Safe Anywhere, Anytime in San José.

Program Priorities and Objectives

The Communications CIP's guiding objective is the provision of reliable, necessary public and non-public safety-related communications equipment for all City employees who need this equipment for their jobs.

Based on the CSA outcomes supported by this program, the following list of priorities has been developed:

- Proactively replace public safetyrelated communications equipment and systems to ensure reliability and optimal performance;
- Defer replacement of additional equipment of non-public safety systems in order to focus on essential police and fire communications;
- Maintain the existing radio equipment in a proactive manner to ensure optimal functionality and extend the term of service; and
- Strategically plan for future major upgrades and technology changes.

Almost the entire Communications CIP is allocated to equipment replacement and upgrade, which supports each of the four priorities. The project entails replacing a large portion of communications equipment over the next five years after careful study and planning. The life of the City's current equipment has been expanded as a result of a proactive maintenance schedule. equipment, nevertheless, will eventually outlive its useful life and the costs of repairing outmoded equipment in some cases have begun to overtake the costs of replacing it.

Over the next few years, the replacement and upgrade of the communications equipment primarily consists of the replacement of extensive fixed-point (base station) radio equipment located at 22 sites throughout the City. This base station equipment transmits calls both to and from mobile radios and dispatch centers for both public safety and

2005-2009 Proposed Capital Improvement Program

Overview

Program Priorities and Objectives (Cont'd.)

non-public safety users. During this upgrade, the transition to a digital microwave communications infrastructure will be necessary to support critical public safety communication.

In 2007-2008, the replacement of over 400 radio modems and base stations that provide the radio data network for public safety vehicles is planned. Evaluation and testing of new technology solutions for secure wireless data services have begun. Part of this process will be to identify potential cost effective alternatives that can continue to provide the same level of reliable mobile data services that are now offered.

Given changes in wireless technology, the positive outcome of the "9-1-1, Fire, Police, Paramedic and Neighborhood Security Act", and anticipated Federal Homeland Defense interoperability initiatives, feasibility studies to support the development of a strategic plan for radio and wireless data communications are currently being prepared. As economic factors continue to impact the General Fund, the staffing capacity to identify and address strategic issues has been reduced. reduction has resulted in the need to prioritize operational and maintenance support for police and fire systems, and has reduced response to non-public safety systems and the efforts to complete a communications strategic plan.

Sources of Funding

Revenue for the Proposed 2005-2009 CIP is derived primarily from two sources:

Construction and Conveyance Tax and General Fund.

The Communications CIP receives 3.40% of the City's Construction and Conveyance Tax. Approximately 97% of this tax is derived from a transfer tax imposed upon each transfer of real property with the remaining 3% generated from a construction tax levied on most types of construction. For the 2005-2009 CIP, it is assumed that collections allocated to the Communications Capital Program will fall to \$612,000 in 2004-2005 (from the current year estimate of \$816,000) and will level off at \$544,000 annually for each of the remaining years of the CIP. These estimates are based on the assumption that the prolonged economic downturn that we have suffered for several years will eventually impact housing sales, which generate this revenue. The budgeted estimates in the 2005-2009 CIP reflect what is believed to be a more sustainable level of housing resale activity, bringing collections in line with 1996 levels before the double-digit growth occurred in this category.

As discussed in previous CIP documents, the projected Construction and Conveyance Tax funds will be insufficient during the next five year period to fully address the programmed ensuring that city-wide communications equipment is functional and modern enough to deliver reliable service to public safety officers and staff who are serving citizens. A number of strategies to close the funding gap are being pursued, including police grant opportunities, public safety partnerships, and Homeland Defense programs to minimize impacts on the General These strategies, however, presume

2005-2009 Proposed Capital Improvement Program

Overview

Sources of Funding (Cont'd.)

that a significant General Fund contribution to this program will be required beginning in 2005-2006.

Program Highlights

Communications Equipment Replacement & Upgrade

As already highlighted, a majority of the Communications Capital Program budget is dedicated to equipment replacement and These funds keep the City's upgrade. communications sites, base stations, and approximately 5,500 mobile radios, portable radios, and mobile data systems functioning and up-to-date. The core radio equipment system was installed in 1990 and has an estimated 10-year life cycle for public safety equipment and 15-year life cycle for nonpublic safety equipment. Much of this equipment is scheduled for replacement with narrow-band capable equipment during the next five years. Both public safety and nonpublic safety customers will benefit from this replacement. The costs associated with the City's microwave network have been accelerated due to a federal grant in the amount of \$2.1 million in 2003-2004.

Fire Dispatch Channel Expansion

The search for two new frequencies continues in order to convert the dispatch channel from a simplex system to a repeater system and add another Command 2 channel for "on-scene" coordination. The project has been deferred in the current year due to the inability to locate frequencies. In addition, the estimated cost has decreased to account for the lower

probability of locating more than one frequency. This project is now scheduled 2005-2006.

Edenvale Radio Site

The Edenvale Radio Site will enhance police radio reception in the Edenvale area, addressing an identified area of poor radio reception. The site will provide additional inbound radio coverage on the SJ8 Police Channel, which serves the entire City.

Police Dispatch Voting Receivers

Starting in 2004-2005, this multi-year project will install additional police voting receivers. A voting receiver is a device that receives voice transmissions and sends them to the 911 center. By installing additional voting receivers, existing radio sites will begin to increase radio coverage across adjoining districts as well enhance police communication reliability between police officers and dispatchers. The estimated project costs have increased to include the addition of new voting receivers in new development areas.

Major Changes from the 2004-2008 Adopted CIP

Major changes from the 2004-2008 Adopted CIP include the following:

 A previously scheduled feasibility study for radio equipment microwave replacement has been removed from the program because a grant was received by the Police Department to conduct the study. Funding in the amount of \$50,000

2005-2009 Proposed Capital Improvement Program

Overview

Major Changes from the 2004-2008 Adopted CIP (Cont'd.)

will be redistributed to the Feasibility Study for the Hidalgo Radio Site. The interest to conduct a feasibility study for the Hidalgo Radio Site has increased due to new developments along the southern portion of San Felipe Road. Once the site is identified, additional funding will be necessary to construct the site.

- New funding in the amount of \$184,000 is recommended for the purchase of Police Dispatch Voting Receivers, which send and receive voice transmissions from patrol vehicles to the 911 center. The estimated project costs have increased to include the addition of new voting receivers in new development areas.
- Two Federal grants were identified for the replacement and upgrade of the City's obsolete analog microwave network, and replacement or augmentation of 160 mobile radios and 633 portable radios for

Public Safety. The two federal grants reduce the previously anticipated need for a \$3.3 million dollar infusion of General Fund money in 2005-2006.

Operating Budget Impact

A total of two projects in the 2005-2009 Proposed CIP have an impact on the operating budget, which is supported by the General Fund. The Edenvale Radio Site and the Police Dispatch Voting Receivers projects will require operating costs for lease agreements to support telephone lines and receivers. The following table shows the net impact of these projects. All projects anticipated to be operational in 2004-2005 have been addressed in the 2004-2005 Proposed Operating Budget. Additional detail on the individual projects with operating budget impacts is provided in the Project Detail Pages. The operating budget impacts of reserves that will be used to fund projects in the future are not reflected in the CIP.

Net Operating Budget Impact Summary

	2005-2006	2006-2007 2007-2008	2008-2009
Edenvale Radio Site	\$ 17,000	\$ 17,000 \$ 17,000	\$ 17,000
Police Dispatch Voting Receivers	\$ 31,000	\$ 31,000 \$ 31,000	\$ 31,000
Total	\$ 48,000	\$ 48,000 \$ 48,000	\$ 48,000

Note: The estimated operating costs have been provided by the Information Technology Department and have not yet been fully analyzed by the Budget Office. That analysis may well result in different costs when the actual budget for the year in question is formulated.

2005-2009 Proposed Capital Improvement Program Chart A - Operating Budget Impact

	2005-2006	2006-2007	2007-2008	2008-2009
Communications Capital Program				
Edenvale Radio Site	\$17,000	\$17,000	\$17,000	\$17,000
Police Dispatch Voting Receivers	\$31,000	\$31,000	\$31,000	\$31,000
Total Communications Capital Program	\$48,000	\$48,000	\$48,000	\$48,000

2005-2009 CAPITAL IMPROVEMENT PROGRAM

Communications

Source of Funds

Use of Funds

The Source of Funds displays the capital revenues by funding source for each year of the Five-Year Capital Improvement Program. The Use of Funds displays the capital expenditures by line-item for each year of the five-year period.

2005-2009 Proposed Capital Improvement Program Source of Funds

COURSE OF FUNDS	Estimated 2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	5-Year Total
SOURCE OF FUNDS							
Communications Construction & Conveyance Tax Fund							
Beginning Fund Balance	1,317,561	868,582	168,582				868,582 *
Revenue from Other Agencies: Federal Government							
Federal Grant for Communications Equipment	2,100,000						
Replacement and Upgrade Taxes, Fees & Charges:							
Construction and Conveyance Tax	816,000	612,000	544,000	544,000	544,000	544,000	2,788,000
Contributions, Loans and Transfers from: General Fund							
Communications Equipment Replacement and Upgrade Capital Funds			1,072,418	58,000	1,671,000	628,000	3,429,418
Transfer from Fire C&C for Fire Dispatch Channel Expansion	6,000		10,000				10,000
Reserve for Encumbrances	1,301,021						
Total Communications Construction & Conveyance Tax Fund	5,540,582	1,480,582	1,795,000	602,000	2,215,000	1,172,000	7,096,000
TOTAL SOURCE OF FUNDS	5,540,582	1,480,582	1,795,000	602,000	2,215,000	1,172,000	7,096,000

^{*} The 2005-2006 through 2008-2009 Beginning Balances are excluded from the FIVE-YEAR TOTAL SOURCE OF FUNDS to avoid multiple counting of the same funds.

2005-2009 Proposed Capital Improvement Program

Use of Funds

	Estimated 2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	5-Year Total
USE OF FUNDS							
Construction Projects							
Fire Dispatch Channel Expansion Public Safety Mobile Computers	6,000 771,000		67,000				67,000
Communications Equipment Replacement and Upgrade	3,820,000	948,000	1,485,000	352,000	1,961,000	916,000	5,662,000
2. Edenvale Radio Site		12,000					12,000
 Police Dispatch Voting Receivers 		184,000	184,000	184,000	184,000	184,000	920,000
4. Purchase of a Service Van		55,000					55,000
Total Construction Projects	4,597,000	1,199,000	1,736,000	536,000	2,145,000	1,100,000	6,716,000
Non-Construction							
General Non-Construction							
Budget Office Capital Program Staff	15,000	32,000	34,000	36,000	38,000	40,000	180,000
CIP Action Team	37,000	16,000	12,000	13,000	14,000	13,000	68,000
Information Technology Staff	23,000	15,000	10,000	11,000	12,000	13,000	61,000
Feasibility Study for Hidalgo Radio Site		50,000					50,000
Total General Non-Construction	75,000	113,000	56,000	60,000	64,000	66,000	359,000
Reserves							
Civic Center Occupancy Reserve			3,000	6,000	6,000	6,000	21,000
Total Reserves			3,000	6,000	6,000	6,000	21,000
Total Non-Construction	75,000	113,000	59,000	66,000	70,000	72,000	380,000
Ending Fund Balance	868,582	168,582					
TOTAL USE OF FUNDS	5,540,582	1,480,582	1,795,000	602,000	2,215,000	1,172,000	7,096,000

^{*} The 2004-2005 through 2007-2008 Ending Balances are excluded from the FIVE-YEAR TOTAL USE OF FUNDS to avoid multiple counting of same funds.

2005-2009 CAPITAL IMPROVEMENT PROGRAM

COMMUNICATIONS

DETAIL OF

CAPITAL PROJECTS

The Detail of Capital Projects section provides information on the individual capital projects with funding in 2004-2005, including the following: project name, City Service Area (CSA) and CSA Outcome supported by the project, responsible department, Council District, project location, project description, project start and completion dates, project justification, project costs by type of expenditure, funding sources for the project, and the annual operating budget impact. On the Use of Funds statement, these projects are numbered.

2005-2009 Proposed Capital Improvement Program Detail of Capital Projects

1. Communications Equipment Replacement and Upgrade

CSA:

Strategic Support

Initial Start Date:

Ongoing

CSA Outcome:

Effective Use of State-of-the-Art Technology

Revised Start Date:

Date:

Department:

Information Technology

Initial Completion Date:

Ongoing

Council District:

City-wide

Revised Completion Date:

Location:

City-wide

Description:

This project funds the replacement of communications equipment based upon useful life expectancy. The project also includes replacement of extensive fixed point (base station) radio equipment at 13 sites and replacement of over 400 radio modems and base stations that provide the radio data network for Public Safety vehicles in 2007-2008.

Justification:

This allocation funds essential communications equipment for Police, Fire, and non-public safety city

operations.

			=	XPENDIT	URE SCH	EDULE (0	00'S)				
Cost Elements	Prior Years	2003-04 Appn.	2003-04 Estimate	2004-05	2005-06	2006-07	2007-08	2008-09	5-Year Total	Beyond 5-Year	Project Total
Equipment Grant		1,720	3,820	948	1,485	352	1,961	916	5,662		
TOTAL		1,720	3,820	948	1,485	352	1,961	916	5,662		
			FUN	IDING SO	URCE SC	HEDULE ((000'S)				
General Fund Communications Construction & Conveyance Tax Fund		1,720	3,820	948	1,485	352	1,961	916	5,662		
TOTAL		1,720	3,820	948	1,485	352	1,961	916	5,662		

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

N/A

Notes:

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project. The 2003-2004 estimate assumes receipt of a federal grant in the amount of \$2.1 million that is anticipated to be received by year end. The source of funds statement also assumes this revenue.

FY Initiated:

Ongoing

Redevelopment Area:

N/A

Initial Project Budget:

SNI Area:

N/A

Appn. #:

4056

2005-2009 Proposed Capital Improvement Program Detail of Capital Projects

2. Edenvale Radio Site

CSA:

Strategic Support

Initial Start Date:

N/A

CSA Outcome:

Effective Use of State-of-the-Art Technology

Revised Start Date:

N/A

Department:

Information Technology

Initial Completion Date: 2nd Qtr. 2004

Council District:

2

Revised Completion Date: 2nd Qtr. 2005

Location:

City-wide

Revised Completion Date. 2nd Qu.

Description:

This project will enhance Police radio reception in the Edenvale area. The site will provide additional in-bound radio coverage on the SJ8 Police channel, serving the entire City and will improve radio communications for dispatchers and police officers within police districts served by the SJ8 radio

channel.

Justification:

With the expansion in the Edenvale area, it is necessary that the City maintain effective public safety

communications.

			8	XPENDIT	URE SCH	EDULE (0	00'S)				
Cost Elements	Prior Years	2003-04 Appn.	2003-04 Estimate	2004-05	2005-06	2006-07	2007-08	2008-09	5-Year Total	Beyond 5-Year	Project Total
Equipment		12		12					12		12
TOTAL		12	-	12					12		12
			FUN	DING SO	JRCE SC	HEDULE ((000'S)				
Communications Construction & Conveyance Tax Fund		12		12					12		12
TOTAL		12		12					12		12
			ANNUA	L OPERA	TING BUD	GET IMP	ACT (000)	S)			
Operating					17	17	17	17			
TOTAL	1				17	17	17	17			-

Major Changes in Project Cost:

None

Notes:

FY Initiated:

2003-2004

Redevelopment Area:

N/A

Initial Project Budget:

\$12,000

SNI Area:

Edenvale/Great Oaks

Appn. #:

4753

2005-2009 Proposed Capital Improvement Program **Detail of Capital Projects**

3. Police Dispatch Voting Receivers

CSA:

Strategic Support

Initial Start Date: 3rd Qtr. 2004

CSA Outcome:

Effective Use of State-of-the-Art Technology

Revised Start Date:

Department:

Information Technology

Initial Completion Date: 2nd Qtr. 2009

Council District:

City-wide

Location:

Revised Completion Date:

City-wide

Description:

This is a multi-year project to install additional police voting receivers and upgrade signal

conditioning devices at existing radio sites. This project will increase radio coverage across

adjoining police districts.

Justification:

This project will improve public safety communications.

	EXPENDITURE SCHEDULE (000'S)										
Cost Elements	Prior ears	2003-04 Appn.	2003-04 Estimate	2004-05	2005-06	2006-07	2007-08	2008-09	5-Year Total	Beyond 5-Year	Project Total
Equipment				184	184	184	184	184	920		920
TOTAL				184	184	184	184	184	920	* .	920
			FUN	IDING SO	URCE SC	HEDULE	(000'S)				
Communications Construction & Conveyance Tax Fund				184	184	184	184	184	920		920
TOTAL				184	184	184	184	184	920		920
			ANNUA	L OPERA	TING BUD	GET IMP	ACT (000'	S)			
Operating					31	31	31	31	i i		
TOTAL			 	- 1 - 1	31	31	31	31			

Major Changes in Project Cost:

The project has expanded to include the addition of new voting receivers in new development areas.

Notes:

FY Initiated:

2004-2005

Redevelopment Area:

N/A

Initial Project Budget:

\$920,000

SNI Area:

N/A

Appn. #:

2005-2009 Proposed Capital Improvement Program **Detail of Capital Projects**

4. Purchase of a Service Van

CSA:

Strategic Support

Initial Start Date:

N/A

CSA Outcome:

Effective Use of State-of-the-Art Technology

Revised Start Date:

N/A

Department:

Information Technology

Initial Completion Date: 4th Qtr. 2002

Council District:

City-wide

Revised Completion Date: 2nd Qtr. 2005

Location:

City-wide

Description:

This project allows procurement for a new service van, allowing greater efficiency and flexibility in

answering mobile service calls. The vehicle will be outfitted with storage lockers, tools and test

equipment.

Justification:

The Radio Shop currently has one van available for use by staff. Given the demands on the existing

vehicle, an additional vehicle is necessary to equip staff to perform overall maintenance of the radio

infrastructure in a timely and cost-effective manner.

			1	XPENDIT	JRE SCH	EDULE (0	00'S)				
Cost Elements	Prior Years	2003-04 Appn.	2003-04 Estimate	2004-05	2005-06	2006-07	2007-08	2008-09	5-Year Total	Beyond 5-Year	Project Total
Maintenance		55		55					55		55
TOTAL		55		55					55		55
			FUN	DING SO	JRCE SC	IEDULE (000'S)	11			
Communications Construction & Conveyance Tax Fund		55		55					55		55
TOTAL		55		55					55		55

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

N/A

The purchase of the service van has been delayed pending the completion of the audit on City vehicles.

FY Initiated:

2002-2003

Redevelopment Area:

N/A

Initial Project Budget:

\$55,000

SNI Area:

N/A

Appn. #:

4508

2005-2009 Proposed Capital Improvement Program Detail of Capital Projects

5. Feasibility Study for Hidalgo Radio Site

CSA:

Strategic Support

Initial Start Date: 3rd. Qtr. 2004

CSA Outcome:

Effective Use of State-of-the-Art Technology

Revised Start Date:

Department:

Information Technology

Initial Completion Date: 2nd. Qtr. 2005

Council District:

City-wide

Revised Completion Date:

Location:

City-wide

Description:

This allocation provides funding to study the feasibility of placing a radio site in or around the

southern San Felipe Road area.

Justification:

This study analyzes the current communication strategy for the City's 911 Dispatch Center in new

development areas along southern San Felipe Road, including the Villages.

		2.0									
Cost Elements	Prior Years	2003-04 Appn.	2003-04 Estimate	2004-05	2005-06	2006-07	2007-08	2008-09	5-Year Total	Beyond 5-Year	Project Total
Master Plan/Study				50					50		50
TOTAL				50					50		50
			FUN	IDING SO	URCE SC	HEDULE	(000'S)				
Communications Construction & Conveyance Tax Fund			· · · · · ·	50					50		50
TOTAL				50					50		50

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

N/A

Notes:

FY Initiated:

2004-2005

Redevelopment Area:

N/A

Initial Project Budget:

\$50,000

SNI Area:

N/A

Appn. #:

2005-2009 Capital Improvement Program

Communications

SUMMARY OF PROJECTS THAT START AFTER 2004-2005

The Summary of Projects that Start after 2004-2005 includes those projects that have funding budgeted starting after 2004-2005. On the Use of Funds statement, the projects in this summary are not numbered.

2005-2009 Proposed Capital Improvement Program

Summary of Projects that Start after 2004-2005

Project Name: Fire Dispatch Channel Expansion

\$67,000

Total Budget:

5-Year CIP Budget:

\$73,000

Council District: City-wide

Initial Start Date:

3rd Qtr. 2003

Revised Start Date:

3rd Qtr. 2003

Initial End Date: 2nd Qtr. 2004

Revised End Date:

2nd Qtr. 2006

Description: Project will move fire dispatch operations to a new radio frequency and enhance radio

coverage within the City.